

## **APPENDIX E**

**FAA, OFFICE OF AIRPORT SAFETY AND STANDARDS**

**CERTALERTS**

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# C E R T A L E R T

**ADVISORY \* CAUTIONARY \* NON-DIRECTIVE**

FOR INFORMATION, CONTACT CERTIFICATION BRANCH, AAS-317 (202)  
267.3339

<b>DATE:</b>	<b>APRIL 25, 1997</b>	<b>NO. 97-02</b>
<b>TO:</b>	<b>AIRPORT CERTIFICATION PROGRAM INSPECTORS</b>	
<b>TOPIC:</b>	<b>RELATIONSHIP BETWEEN FAA AND WS</b>	

The attached Certalert clarifies the roles of, and relationship between the Federal Aviation Administration (FAA) and the United States Department of Agriculture/ Animal and Plant Health Inspection Service/Animal Damage Control (WS) with regards to wildlife hazards on or near airports.

Robert E. David

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Manager, Airport Safety and Compliance

Date: April 25, 1997

CERTALERT DISTRIBUTION LIST

## **RELATIONSHIP BETWEEN FAA AND WS.**

### **PURPOSE**

This Certalert clarifies the roles of, and relationship between the Federal Aviation Administration (FAA) and the United States Department of Agriculture/ Animal and Plant Health Inspection Service/Animal Damage Control (WS) with regards to wildlife hazards on or near airports.

#### **Federal Aviation Administration**

The FAA issues airport operating certificates for airports serving certain air carrier aircraft under Title 14, Code of Federal Regulations, part 139. Section 139.337 requires certificated airports having a wildlife hazard problem to develop and implement a Wildlife Hazard Management Plan to manage and control wildlife which present a risk to public safety caused by aircraft collisions with wildlife. The FAA relies heavily on the assistance of WS to review and contribute to such plans.

#### **Animal Damage Control**

The Animal Damage Control Act of March 2, 1931, (7 USC 426-426c, as amended), charges the Secretary of Agriculture with management of wildlife injurious to agricultural interests, other wildlife, or human health and safety. Further, the Secretary is authorized to cooperate with States, individuals, public and private agencies, organizations, and institutions in the control of nuisance mammals and birds, including wildlife hazards to aviation. Because of the experience, training, and background of its personnel, WS is recognized throughout the world as an expert in dealing with wildlife damage management issues. WS has an active presence in all U.S. states and territories.

### **MEMORANDUM OF UNDERSTANDING**

A Memorandum of Understanding (MOU) between the FAA and WS (No. 12-4-71-0003-MOU) establishes a cooperative relationship between these agencies for resolving wildlife hazards to aviation.

### **AGENCY FUNDING**

Both agencies are funded by congressional appropriations. The majority of funding for the FAA comes from the Aviation Trust Fund with the remainder coming from the general funds of the U.S. Treasury. Any revenues generated by the FAA are returned to the U.S. Treasury. WS receives a limited amount of funds from the general fund of the U.S. Treasury that allows it to perform some services for the public good. However, WS's funding is also based upon its ability to enter into contracts to provide services and receive reimbursement for the cost of the services. Legislation allows WS to collect this money and return it to the program rather than the general funds of the U.S.

Treasury. Consequently, WS may enter into a cooperative service agreement with an airport operator for reimbursement of services to perform an ecological study<sup>1</sup> on an airport.

## WILDLIFE HAZARD MANAGEMENT

14 CFR part 139.337 requires the certificate holder conduct an ecological study acceptable to the FAA Administrator, when any of the following events occur on or near the airport:

1. An air carrier aircraft experiences a multiple bird strike or engine ingestion, or
2. An air carrier aircraft experiences a damaging collision with wildlife other than birds, or
3. Wildlife of a size or in numbers capable of causing an event described in paragraph (1) or (2) is observed to have access to any airport flight pattern or movement area.

The ecological study shall contain at least the following:

1. Analysis of the event which prompted the study.
2. Identification of the species, numbers, locations, local movements, and daily and seasonal occurrences of wildlife observed.
3. Identification and location of features on and near the airport that attract wildlife.
4. Description of the wildlife hazard to air carrier operations.

The certificate holder may look to WS or to private consultants to conduct the required ecological study. However, because the FAA to determine if a Wildlife Hazard Management Plan is needed for the airport uses the ecological study, persons having the education, training, and experience necessary to adequately assess any wildlife hazards should conduct it.

WS may conduct preliminary Wildlife Hazard Assessments at no charge to the certificate holder, as WS's funding and personnel limitations permit. More detailed assessments may require the certificate holder to enter into a cooperative service agreement with WS.

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<sup>1</sup> USDA, Wildlife Services, uses the term "Wildlife Hazard Assessment." 14 CFR 139.337(a) uses the term "Ecological Study." In this context the two terms should be considered synonymous. Wildlife Hazard Assessment is the preferred term because it is more descriptive of what is actually being done.

# C E R T A L E R T

**ADVISORY \* CAUTIONARY \* NON-DIRECTIVE**

FOR INFORMATION, CONTACT AIRPORT WILDLIFE SPECIALIST, AAS-317 (202)  
267.3339

**DATE: 17 November, 1997**

**No. 97-09**

**TO: AIRPORT CERTIFICATION SAFETY INSPECTORS**

**TOPIC: WILDLIFE HAZARD MANAGEMENT PLAN OUTLINE**

A increasing number of questions are being received concerning the preparation and content of an FAA approved airport Wildlife Hazard Management Plan. Title 14 Code of Federal Regulations, part 139.337, *Wildlife Hazard Management*, prescribes the specific issues that a Wildlife Hazard Management Plan must address for FAA approval and inclusion in the ACM.

A Wildlife Hazard Assessment, defined as an ecological study in part 139.337 (a), conducted by a wildlife damage management biologist, provides the scientific basis for the development , implementation, and refinement of a Wildlife Hazard Management Plan. Though parts of the Wildlife Hazard Assessment may be incorporated directly in the Wildlife Hazard Management Plan, they are two separate documents. Part of the Wildlife Hazard Management Plan can be prepared by the biologist(s) who conducts the Wildlife Hazard Assessment. However, some parts can be prepared only by the airport. For example, airport management assigns airport personnel responsibilities, commits airport funds, and purchases equipment and supplies. Airport management may request the wildlife biologist to review the finished plan.

The wildlife damage management biologist's primary responsibilities are:

- to provide information on the wildlife attractants that have been identified on or near the airport,
- to identify wildlife management techniques,
- to prioritize appropriate mitigation measures,
- to recommend necessary equipment and supplies, and
- to identify training requirements for the airport personnel who will implement the Wildlife Hazard Management Plan.

It is often helpful for the airport manager to appoint a Wildlife Hazard Management Group that has responsibility for the airport's wildlife management program. The biologist should assist the Wildlife Hazard Management Group with periodic evaluations of the plan and make recommendations for further refinements or modifications.

The following details the requirements of part 139.337 (e) and (f) and how those requirements should be addressed in an FAA-approved Wildlife Hazard Management Plan.

14 CFR 139.337	Comments
139.337(e). The (wildlife hazard management) plan shall include at least the following :	The Wildlife Hazard Management Plan must include, and/or identify the responsibility of, and/or actions to be taken, –
139.337(e)(1). The persons who have authority and responsibility for implementing the plan.	<p>Specific responsibilities for various sections of the Wildlife Hazard Management Plan must be assigned or delegated to various airport departments such as:</p> <ul style="list-style-type: none"> <li>Airport Director</li> <li>Operations Dept.</li> <li>Maintenance Dept.</li> <li>Security Dept.</li> <li>Planning Dept.</li> <li>Finance Dept.</li> <li>Wildlife Coordinator</li> <li>Wildlife Hazard Group</li> </ul> <p>Local law enforcement authorities that provide wildlife law enforcement and other support also have a role to play:</p> <ul style="list-style-type: none"> <li>State Fish and Game</li> <li>U.S. Fish and Wildlife Service</li> <li>City police</li> <li>County Sheriff</li> </ul>
139.337(e)(2). Priorities for needed habitat modification and changes in land use identified in the ecological study with target dates for completion.	<p>Attractants (food, cover, and water) identified in Wildlife Hazard Assessment, with priorities for mitigation and completion dates. Attractants can be grouped by areas and ownership. (A list of completed habitat modification or other projects designed to reduce the wildlife/aircraft strike potential can be included, and provides a history of work already accomplished.)</p> <ul style="list-style-type: none"> <li>Airport property: <ul style="list-style-type: none"> <li>Aircraft Operations Area (AOA).</li> <li>Within 2 miles of aircraft movement areas.</li> <li>Within 5 miles of aircraft movement areas.</li> <li>Airport structures</li> </ul> </li> <li>Non-airport property <ul style="list-style-type: none"> <li>Within 2 miles of aircraft movement areas.</li> <li>Within 5 miles of aircraft movement areas.</li> <li>Structures</li> </ul> </li> </ul>

14 CFR 139.337	Comments
Habitat/population management recommendations	<p>Management plans for specific areas, attractants, species, or situations, as identified in ecological study (Wildlife Hazard Assessment). This section may include any or all of the following:</p> <p>Food/Prey-base Management</p> <ul style="list-style-type: none"> <li>Rodents</li> <li>Earthworms</li> <li>Insects</li> <li>Other prey</li> <li>Trash and debris - handling, storage.</li> <li>Handouts</li> </ul> <p>Species specific population management</p> <ul style="list-style-type: none"> <li>i.e. deer, gulls, geese, coyotes</li> <li>Repelling</li> <li>Exclusion</li> <li>Removal</li> </ul> <p>Habitat Management</p> <ul style="list-style-type: none"> <li>Vegetation Management <ul style="list-style-type: none"> <li>AOA vegetation</li> <li>Drainage ditch(s) vegetation</li> <li>Landscaping</li> <li>Agriculture</li> </ul> </li> <li>Water Management <ul style="list-style-type: none"> <li>Permanent Water <ul style="list-style-type: none"> <li>Wetlands</li> <li>Canals/drainage ditches</li> <li>Detention/retention ponds</li> <li>Sewage (glycol) treatment ponds</li> <li>Other water areas</li> </ul> </li> <li>Ephemeral water <ul style="list-style-type: none"> <li>Runways, taxiways, &amp; aprons.</li> <li>Other wet areas</li> </ul> </li> </ul> </li> <li>Airport Buildings <ul style="list-style-type: none"> <li>Airfield structures</li> <li>Abandoned structures</li> <li>Terminal</li> </ul> </li> <li>Airport construction</li> </ul> <p>Resource Protection</p> <ul style="list-style-type: none"> <li>Exclusion</li> <li>Repelling <ul style="list-style-type: none"> <li>Chemical</li> <li>Auditory</li> <li>Visual</li> </ul> </li> </ul>



14 CFR 139.337	Comments
139.337(e)(3). Requirements for and, where applicable, copies of local, state and Federal wildlife control permits.	<p>Wildlife can be protected at all levels of government – city, county, state, federal, or may not be protected at all, depending on location and species. Therefore the section should address the specific species involved and their legal status.</p> <p>Wildlife management permitting requirements and procedures (spelled out)</p> <p style="padding-left: 40px;">Federal - 50 CFR parts 1 to 199.</p> <p style="padding-left: 40px;">State - Fish and Game Code (or equivalent)</p> <p style="padding-left: 40px;">City, county - ordinances</p> <p>If pesticides are to be used, then the following are also needed.</p> <p>Pesticide use regulations</p> <p style="padding-left: 40px;">Federal- [Federal Insecticide, Fungicide, and Rodenticide Act, as amended (FIFRA)]</p> <p style="padding-left: 40px;">State (varies by state)</p> <p style="padding-left: 40px;">City/county (if applicable)</p> <p>Pesticide use licensing requirements</p> <p style="padding-left: 40px;">State regulations</p>
139.337(e)(4). Identification of resources to be provided by the certificate holder for implementation of the plan.	<p>Lists identifying what the airport will supply in terms of:</p> <p style="padding-left: 40px;">Personnel</p> <p style="padding-left: 40px;">Time</p> <p style="padding-left: 40px;">Equipment, (i.e. radios, vehicle(s), guns, and traps).</p> <p style="padding-left: 40px;">Supplies (i.e. shellcrackers, mylar tape)</p> <p style="padding-left: 40px;">Wildlife Patrol</p> <p style="padding-left: 80px;">Personnel</p> <p style="padding-left: 80px;">Vehicle(s)</p> <p style="padding-left: 80px;">Equipment</p> <p style="padding-left: 80px;">Supplies</p> <p style="padding-left: 40px;">Pesticides</p> <p style="padding-left: 80px;">Restricted/non-restricted</p> <p style="padding-left: 80px;">Application equipment</p> <p style="padding-left: 40px;">Sources of Supply</p>
139.337(e)(5). Procedures to be followed during air carries operations, including at least...	
139.337(e)(5)(i). Assignment of personnel responsibilities for implementing the procedures;	<p>Who, when, what circumstances</p> <p style="padding-left: 40px;">Wildlife Patrol</p> <p style="padding-left: 40px;">Wildlife Coordinator</p> <p style="padding-left: 40px;">Operations Dept.</p> <p style="padding-left: 40px;">Maintenance Dept.</p> <p style="padding-left: 40px;">Security Dept.</p> <p style="padding-left: 40px;">Air Traffic Control</p>
139.337(e)(5)(ii). Conduct of physical inspections of the movement areas and other areas critical to wildlife hazard management sufficiently in advance of air carrier operations to allow time for wildlife controls to be effective;	<p>Who, when, how, what circumstances --</p> <p style="padding-left: 40px;">Runway(s), taxiway(s), and ramp(s) sweeps,</p> <p style="padding-left: 40px;">AOA monitoring</p> <p style="padding-left: 40px;">Un-mitigated attractants</p>

14 CFR 139.337	Comments
139.337(e)(5)(iii). Wildlife control measures;	Who, what circumstances, when, how is the Wildlife Patrol contacted. Wildlife Patrol Bird Control repel capture kill Mammal control repel capture kill
139.337(e)(5)(iv). Communication between wildlife control personnel and any air traffic control tower in operation at the airport.	Communication procedures Training in communication procedures Equipment needed Radios, mobile phones, etc. Lights
139.337(e)(6). Periodic evaluation and review of the Wildlife Hazard Management Plan for:	At a minimum the airport operator should hold annual meetings, or after an event described in 139.337(a)(1 to 3), with representatives from all airport departments involved in the airport's wildlife hazard management efforts and the wildlife damage management biologist who did the original ecological study (Wildlife Hazard Assessment).
139.337(e)(6)(i). Effectiveness in dealing with the wildlife hazard;	Input from all airport departments, ATC, wildlife biologist, as to effectiveness of plan. Good records are a must for evaluating the effectiveness of a program. Therefore need to know what records are kept, by who, how, where, and when.
139.337(e)(6)(ii). Indications that the existence of the wildlife hazard, as previously described in the ecological study, should be reevaluated.	Wildlife seen on AOA Request for wildlife dispersal from Tower, pilots, or others Wildlife strike database and other records. Good records are a must.
139.337(e)(7). A training program to provide airport personnel with the knowledge and skills needed to carry out the Wildlife Hazard Management Plan required by paragraph (d) of this section.	Wildlife Patrol personnel training All airport personnel – wildlife hazard awareness training Pesticide use training and certification

14 CFR 139.337	Comments
<p>139.337(f). Notwithstanding the other requirements of this section, each certificate holder shall take immediate measures to alleviate wildlife hazards whenever they are detected.</p>	<p>Although not required as part of Wildlife Hazard Management Plan, this information should be included to fulfill part 139 requirements.</p> <p>Procedures and personnel responsibilities for notification regarding new or immediate hazards by and to:</p> <ul style="list-style-type: none"> <li>Wildlife Patrol</li> <li>Operations</li> <li>NOTAM issuance/cancellation criteria and procedures</li> <li>Maintenance</li> <li>Security</li> <li>Air Traffic Control</li> <li>Others</li> </ul> <p>Rapid response procedures for new or immediate hazards by:</p> <ul style="list-style-type: none"> <li>Wildlife Patrol</li> <li>Operations</li> <li>Maintenance</li> <li>Security</li> <li>Air Traffic Control</li> <li>Others</li> </ul>
<p>139.337(g). FAA Advisory Circulars in the 150 series contain standards and procedures for wildlife hazard management at airports, which are acceptable to the Administrator.</p>	<p>AC 150/5200--33 Hazardous Wildlife Attractants on or Near Airports.</p>

Benedict D. Castellano, Manager  
 Airport Safety and Compliance Branch

# CERTALERT

**ADVISORY      CAUTIONARY      NON-DIRECTIVE**

FOR INFORMATION, CONTACT AIRPORT WILDLIFE SPECIALIST, AAS-317 (202) 267.3389

**DATE:** September, 18, 1998 **No. 98-05**

**TO:** Airport Operators,  
FAA Airport Certification Safety Inspectors

**TOPIC:** Grasses Attractive To Hazardous Wildlife

Recently, several reports have been received of airport owners or airport contractors planting disturbed areas (construction sites, re-grading projects, etc) with seed mixtures containing brown-top millet. All millets are a major attractant to doves and other seed eating birds.

Doves can be a major threat to aircraft safety. In the United States, between 1991 and 1997, doves were involved in 11% of all reported bird/aircraft strikes, 8% of the reported strikes that resulted in aircraft down time, and 8% of the reported strikes causing aircraft damage or other associated monetary losses.

Airport operators should ensure that grass species and other varieties of plants attractive to hazardous wildlife are not used on the airport. Disturbed areas or areas in need of re-vegetating should not be planted with seed mixtures containing millet or any other large-seed producing grass.

For airport property already planted with seed mixtures containing millet or other large-seed producing grasses, it is recommended that disking, plowing, or other suitable agricultural practice be employed to prevent plant maturation and seed head production.

For specific recommendations on grass management and seed selection, contact the State University Cooperative Extension Service, or the local office of the USDA, Wildlife Services.

OSB

Benedict D. Castellano, Manager  
Airport Safety and Compliance Branch

September 18, 1998